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The Great American Smokeout — November 20, 1997

In 1994, an estimated 48 million U.S. adults were current cigarette smokers; in 1996, at least 4 million U.S. adolescents were current cigarette smokers (*1,2*). Since 1977, the American Cancer Society (ACS) has sponsored the Great American Smokeout to promote community-based activities that encourage smokers to refrain from smoking cigarettes for at least 24 hours. This year, the Great American Smokeout is Thursday, November 20. This nationwide effort can increase cessation attempts (*3*): for example, the 1996 promotion was associated with helping an estimated 7400 persons quit smoking (*4*). This year's promotion focuses on the prevention of both cigar and cigarette smoking and cautions children and adolescents never to start smoking.

Activities this year will include the ACS *Commit to Quit* program, which helps smokers choose a method of quitting that meets their personal needs. In addition, ACS volunteers will conduct smoking-cessation and smoking-prevention activities for persons of all ages at shopping malls, work sites, hospitals, military installations, and other locations.

Additional information is available from ACS, telephone (800) 227-2345 or (404) 320-3333; CDC, telephone (800) 232-1311 or (770) 488-5705; or the ACS Great American Smokeout website on the World-Wide Web (http://www.cancer.org).

Reported by: American Cancer Society, Atlanta, Georgia. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

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State-Specific Prevalence of Cigarette Smoking Among Adults, and Children's and Adolescents' Exposure to Environmental Tobacco Smoke — United States, 1996

In 1996, the prevalence of cigarette smoking was added to the list of nationally notifiable health conditions reported by states to CDC (*1*). The addition of a health-related behavior to the list of diseases and illnesses reflected the recognized role of tobacco use as the leading preventable cause of death in the United States (*2*). This report summarizes the 1996 prevalence of current smoking among adults in 49 states and the District of Columbia and presents state-specific estimates of environmental tobacco smoke (ETS) exposure for children and adolescents residing in homes where adults smoke. The findings indicate that state-specific smoking prevalence among adults varied twofold and that approximately 15 million children and adolescents were exposed to ETS in their home.

State-specific data about adult smoking prevalence were obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a state-based, random-digit–dialed telephone survey of the noninstitutionalized U.S. population aged ≥18 years. The 1996 BRFSS was conducted in 49 states and the District of Columbia. Respondents were asked "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Current smokers were defined as persons who reported having smoked ≥100 cigarettes during their lifetimes and who currently smoked every day or on some days. Estimates were weighted to represent the populations of each state. For estimates of the percentage of homes with both current cigarette smokers and children and adolescents (persons aged <18 years) living at home, data were weighted to represent the number of households in each state.

Children's and adolescents' ETS exposure was calculated by applying the BRFSS-derived prevalence estimates to data from the 1992–1993 and 1996 Current Population surveys (CPSs), an annual survey of the civilian, noninstitutionalized U.S. population. Responses to questions included in the September 1992, January 1993, and May 1993 CPS were used to calculate the state-specific percentage of households that had an adult smoker and any children aged <18 years and that permitted smoking in all or some areas of the home (*3*). To estimate the percentage of households in which a child was exposed to ETS from an adult smoker residing in the home, the percentage of households in which smoking was allowed in the home (1992–1993 CPS) was applied to the percentage of households with an adult smoker and any children (1996 BRFSS). Finally, the resulting percentage was applied to the number of households and multiplied by the number of children in the home (1996 CPS) to calculate the number of children exposed to ETS in the home. Variances associated with these estimates were combined using a Taylor-Series approximation method.

During 1996, the median prevalence of current smoking was 23.6% (Table 1); state-specific prevalences ranged from 15.9% (Utah) to 31.6% (Kentucky). Range endpoints were higher for men (18.6%–33.9%) than for women (13.4%–29.5%). The percentage of households with an adult smoker and any children ranged from 7.0% (District of Columbia) to 14.9% (Alaska) (Table 2). The percentage of households with an adult smoker and children and in which smoking was allowed in some or all areas of the home ranged from 70.6% (Washington) to 95.6% (District of Columbia). The estimated number of children exposed to ETS in the home ranged from 32,105 (Delaware) to

Cigarette Smoking — Continued

TABLE 1. Prevalence of current cigarette smoking among adults,* by state† and sex — United States, Behavioral Risk Factor Surveillance System, 1996

State	Men		Women		Total	
	%	(95% CI§)	%	(95% CI)	%	(95% CI)
Alabama	24.4	(±3.3%)	20.8	(±2.4%)	**22.5**	**(±2.1%)**
Alaska	30.9	(±5.2%)	24.3	(±4.1%)	**27.7**	**(±3.4%)**
Arizona	27.2	(±4.2%)	20.6	(±3.2%)	**23.8**	**(±2.5%)**
Arkansas	27.7	(±4.2%)	23.3	(±2.7%)	**25.4**	**(±2.4%)**
California	21.4	(±2.2%)	15.9	(±1.6%)	**18.6**	**(±1.4%)**
Colorado	24.5	(±3.5%)	21.2	(±2.8%)	**22.8**	**(±2.2%)**
Connecticut	22.7	(±3.5%)	21.2	(±2.9%)	**21.9**	**(±2.2%)**
Delaware	25.0	(±3.3%)	23.5	(±2.7%)	**24.2**	**(±2.2%)**
District of Columbia	23.8	(±4.4%)	17.8	(±3.0%)	**20.6**	**(±2.6%)**
Florida	23.3	(±2.3%)	20.4	(±1.9%)	**21.8**	**(±1.5%)**
Georgia	24.7	(±3.2%)	16.3	(±2.2%)	**20.3**	**(±1.9%)**
Idaho	21.3	(±2.6%)	21.1	(±2.2%)	**21.2**	**(±1.7%)**
Illinois	26.3	(±2.8%)	23.5	(±2.3%)	**24.8**	**(±1.8%)**
Indiana	31.6	(±3.2%)	26.0	(±2.6%)	**28.7**	**(±2.1%)**
Iowa	26.3	(±2.5%)	21.2	(±1.9%)	**23.6**	**(±1.6%)**
Kansas	26.1	(±3.3%)	18.3	(±2.4%)	**22.1**	**(±2.0%)**
Kentucky	33.8	(±2.9%)	29.5	(±2.1%)	**31.6**	**(±1.8%)**
Louisiana	31.6	(±3.9%)	20.8	(±2.8%)	**25.9**	**(±2.4%)**
Maine	28.9	(±3.7%)	22.0	(±2.9%)	**25.3**	**(±2.4%)**
Maryland	22.6	(±2.5%)	19.6	(±1.9%)	**21.0**	**(±1.5%)**
Massachusetts	23.9	(±3.6%)	22.9	(±2.9%)	**23.4**	**(±2.3%)**
Michigan	26.5	(±2.9%)	24.8	(±2.4%)	**25.6**	**(±1.9%)**
Minnesota	21.7	(±2.0%)	19.5	(±1.7%)	**20.6**	**(±1.3%)**
Mississippi	28.6	(±4.2%)	18.5	(±2.6%)	**23.2**	**(±2.4%)**
Missouri	29.0	(±4.0%)	26.7	(±3.1%)	**27.8**	**(±2.5%)**
Montana	20.5	(±3.1%)	22.8	(±2.9%)	**21.7**	**(±2.2%)**
Nebraska	25.4	(±4.5%)	18.9	(±2.5%)	**22.0**	**(±2.6%)**
Nevada	28.5	(±4.5%)	28.0	(±4.0%)	**28.2**	**(±3.0%)**
New Hampshire	25.5	(±4.3%)	24.3	(±3.5%)	**24.9**	**(±2.7%)**
New Jersey	25.0	(±2.9%)	20.9	(±2.2%)	**22.8**	**(±1.8%)**
New Mexico	24.9	(±5.0%)	20.9	(±3.8%)	**22.9**	**(±3.1%)**
New York	23.2	(±2.2%)	23.3	(±1.8%)	**23.3**	**(±1.4%)**
North Carolina	30.0	(±3.2%)	21.9	(±2.3%)	**25.7**	**(±2.0%)**
North Dakota	24.4	(±3.4%)	22.5	(±2.9%)	**23.4**	**(±2.3%)**
Ohio	33.9	(±4.2%)	23.6	(±3.1%)	**28.5**	**(±2.6%)**
Oklahoma	26.4	(±3.7%)	21.9	(±3.0%)	**24.1**	**(±2.4%)**
Oregon	24.4	(±2.7%)	22.6	(±2.2%)	**23.5**	**(±1.7%)**
Pennsylvania	23.8	(±2.4%)	25.2	(±2.1%)	**24.5**	**(±1.6%)**
Rhode Island	25.7	(±3.5%)	19.8	(±2.6%)	**22.5**	**(±2.2%)**
South Carolina	25.3	(±4.2%)	23.8	(±3.0%)	**24.5**	**(±2.5%)**
South Dakota	22.3	(±2.9%)	19.2	(±2.4%)	**20.7**	**(±1.9%)**
Tennessee	31.1	(±2.9%)	25.2	(±2.2%)	**28.0**	**(±1.8%)**
Texas	27.5	(±3.7%)	18.5	(±2.6%)	**22.9**	**(±2.2%)**
Utah	18.6	(±2.7%)	13.4	(±2.1%)	**15.9**	**(±1.7%)**
Vermont	26.6	(±3.7%)	21.8	(±2.4%)	**24.1**	**(±2.2%)**
Virginia	27.6	(±3.7%)	22.2	(±2.8%)	**24.8**	**(±2.3%)**
Washington	24.6	(±2.4%)	22.4	(±2.1%)	**23.5**	**(±1.6%)**
West Virginia	28.0	(±3.2%)	25.5	(±2.5%)	**26.7**	**(±2.0%)**
Wisconsin	27.6	(±3.6%)	22.4	(±2.9%)	**24.9**	**(±2.3%)**
Wyoming	24.4	(±2.9%)	24.8	(±2.5%)	**24.6**	**(±1.9%)**
Range	*18.6–33.9*		*13.4–29.5*		***15.9–31.6***	
Median	*25.5*		*22.0*		***23.6***	

*Persons aged ≥18 years who reported having smoked ≥100 cigarettes and who reported smoking every day or some days.
†No data were available for Hawaii.
§Confidence interval.

TABLE 2. Percentage of households with an adult* current cigarette smoker and any children and adolescents† in the home, rules§ about smoking in the home, and the estimated number of children exposed to environmental tobacco smoke (ETS) in the home, by state¶ — United States, Behavioral Risk Factor Surveillance System, 1996

State	Current cigarette smoker and any children in the home		Smoking allowed in some or all areas of the home		Children exposed to ETS in the home		
	%	(95% CI**)	%	(95% CI)	%	No.	(95% CI)
Alabama	10.0	(±1.3%)	88.0	(±5.5%)	23.6	289,110	(± 45,817)
Alaska	14.9	(±2.6%)	77.9	(±6.3%)	21.6	47,493	(± 9,244)
Arizona	9.8	(±1.8%)	76.9	(±7.3%)	18.5	227,316	(± 51,459)
Arkansas	10.8	(±1.4%)	90.2	(±4.5%)	26.6	177,686	(± 28,902)
California	7.3	(±0.8%)	72.3	(±3.3%)	12.3	1,114,865	(±154,535)
Colorado	9.1	(±1.4%)	81.6	(±7.1%)	19.0	193,138	(± 34,746)
Connecticut	9.7	(±1.5%)	84.4	(±6.8%)	20.8	186,859	(± 34,432)
Delaware	10.0	(±1.3%)	86.2	(±6.4%)	17.7	32,105	(± 5,663)
District of Columbia	7.0	(±1.6%)	95.6	(±5.1%)	31.8	40,196	(± 9,985)
Florida	8.1	(±0.9%)	79.8	(±3.3%)	19.6	692,720	(± 86,083)
Georgia	8.8	(±1.2%)	91.0	(±4.8%)	21.0	423,332	(±108,547)
Idaho	9.3	(±1.1%)	79.9	(±6.1%)	18.6	61,811	(± 8,996)
Illinois	9.7	(±1.1%)	87.6	(±2.8%)	24.1	773,657	(± 92,787)
Indiana	11.6	(±1.3%)	85.4	(±5.1%)	27.5	420,257	(± 58,376)
Iowa	11.4	(±1.1%)	91.7	(±4.1%)	27.2	231,575	(± 28,310)
Kansas	8.9	(±1.3%)	88.9	(±4.6%)	22.8	161,255	(± 26,077)
Kentucky	13.9	(±1.3%)	95.0	(±3.2%)	34.2	363,937	(± 40,646)
Louisiana	10.7	(±1.5%)	85.4	(±5.8%)	23.0	294,892	(± 51,436)
Maine	11.3	(±1.6%)	86.7	(±4.9%)	25.3	79,530	(± 12,242)
Maryland	8.8	(±0.9%)	89.3	(±6.1%)	20.1	270,018	(± 39,213)
Massachusetts	7.4	(±1.2%)	84.3	(±3.4%)	19.7	297,469	(± 52,068)
Michigan	10.9	(±1.2%)	91.2	(±2.3%)	26.8	716,003	(± 85,401)
Minnesota	9.1	(±0.9%)	88.9	(±4.6%)	21.6	282,794	(± 33,276)
Mississippi	11.2	(±1.7%)	86.2	(±5.7%)	23.6	192,720	(± 34,155)
Missouri	10.2	(±1.5%)	88.9	(±5.1%)	26.9	352,936	(± 58,571)
Montana	8.6	(±1.3%)	92.9	(±4.2%)	23.3	52,487	(± 8,773)
Nebraska	9.4	(±1.3%)	86.0	(±5.2%)	21.0	96,897	(± 15,293)
Nevada	8.7	(±1.6%)	86.0	(±5.8%)	20.8	84,551	(± 16,847)
New Hampshire	10.4	(±1.6%)	87.0	(±6.0%)	24.6	70,576	(± 12,163)
New Jersey	9.8	(±1.2%)	82.9	(±3.6%)	20.4	398,218	(± 49,758)

New Mexico	10.0	(±2.0%)	81.9	(±6.0%)	19.1	103,431	(± 26,654)
New York	9.6	(±0.9%)	88.9	(±2.2%)	23.2	1,120,051	(±111,384)
North Carolina	10.1	(±1.2%)	87.5	(±2.7%)	26.1	416,544	(± 51,488)
North Dakota	10.0	(±1.4%)	89.7	(±4.8%)	23.9	42,729	(± 6,663)
Ohio	11.8	(±1.6%)	91.0	(±2.2%)	29.8	919,290	(±128,696)
Oklahoma	9.7	(±1.6%)	91.7	(±4.3%)	25.6	216,335	(± 36,983)
Oregon	9.8	(±1.1%)	75.9	(±7.8%)	20.1	167,533	(± 26,977)
Pennsylvania	11.0	(±1.1%)	87.6	(±2.7%)	27.9	858,229	(± 87,807)
Rhode Island	9.3	(±1.4%)	92.4	(±4.9%)	23.9	53,646	(± 8,179)
South Carolina	11.3	(±1.7%)	86.2	(±4.7%)	22.2	240,315	(± 43,386)
South Dakota	8.6	(±1.3%)	89.7	(±4.3%)	22.3	45,027	(± 7,448)
Tennessee	14.0	(±1.4%)	90.0	(±4.4%)	32.1	488,846	(± 64,578)
Texas	9.6	(±1.4%)	82.0	(±3.4%)	18.4	995,462	(±158,639)
Utah	8.0	(±1.2%)	73.5	(±8.4%)	11.7	82,929	(± 16,503)
Vermont	10.4	(±1.3%)	88.4	(±5.2%)	24.2	42,340	(± 6,499)
Virginia	8.6	(±1.3%)	87.5	(±4.8%)	22.5	336,794	(± 59,265)
Washington	9.5	(±1.1%)	70.6	(±7.5%)	17.7	244,887	(± 39,191)
West Virginia	10.8	(±1.2%)	93.6	(±3.5%)	30.4	128,665	(± 17,100)
Wisconsin	11.4	(±1.6%)	90.9	(±4.1%)	28.5	428,302	(± 67,344)
Wyoming	10.2	(±1.2%)	86.8	(±5.9%)	23.0	33,950	(± 5,017)
Range	*7.0–14.9*		*70.6–95.6*			*32,105–1,120,051*	
Median	*9.8*		*87.5*			*229,446*	

* Persons aged ≥18 years who reported having smoked ≥100 cigarettes and who reported smoking every day or some days.
† Persons aged <18 years.
§ Based on the 1992–93 Current Population Survey question, "Which statement best describes the rules about smoking in your home?" Allowing smoking is defined as "Smoking is allowed in some places or at some times" and "Smoking is permitted anywhere." Restricted to adult smokers with children in the home.
¶ No data were available for Hawaii.
** Confidence interval.

Cigarette Smoking — Continued

1,120,051 (New York), and the estimated percentage of children ranged from 11.7% (Utah) to 34.2% (Kentucky) (Table 2).

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Editorial Note: The findings in this report highlight the wide range of smoking prevalence and children's and adolescents' exposure to ETS across states and underscore the large population at risk for serious health effects of tobacco use (both smokers and nonsmokers). Compared with 1995 (*4*), the 1996 median prevalence of current smoking among adults increased approximately 1%; in 24 states, state-specific prevalences increased ≥1%, and increases were statistically significant in 10 states. The increase from 1995 to 1996 may reflect, in part, the 1996 change in the definition used to assess self-reported smoking prevalence (in 1995, respondents were asked "Have you smoked at least 100 cigarettes in your entire lifetime?" and "Do you smoke cigarettes now?") (*5*). By including some-day smoking with every-day smoking in the definition of current smoking, prevalence estimates increase by approximately 1% (*5*).

The estimates in this report are subject to at least three limitations. First, because the proportion of restrictive smoking policies in the home may have increased since 1992–1993, the CPS data may have overestimated the percentage of households in which smoking in all or some areas was permitted. Second, total exposures for children may have been underestimated because of failure or inability to include other sources of exposure to ETS both inside the home (e.g., a household guest smoking a cigarette, cigar, or pipe) and outside the home. Finally, prevalence estimates may be underestimated because data were collected through telephone interviews; previous studies have documented substantial differences in the characteristics of persons who reside in households without a telephone compared with those who reside in households with a telephone.

In 1992, the Environmental Protection Agency classified ETS as a Group A carcinogen known to cause cancer in humans (*6*). The primary source of children's exposure to ETS is in the home (*7*); children exposed to ETS are at an increased risk for sudden infant death syndrome, acute lower respiratory tract infections, asthma induction and exacerbation, and middle-ear effusions (*6,8*). The findings in this report indicate that approximately one third to one half of adult current cigarette smokers have children residing in their homes, and in most (>70%) of those homes smoking was permitted in

Cigarette Smoking — Continued

some or all areas of the home. Therefore, during 1996, approximately 15 million (21.9%) children and adolescents aged <18 years were exposed to ETS in homes. One of the national health objectives for 2000 is to reduce to ≤20% the number of children aged ≤6 years exposed to ETS in the home (objective 3.8) (*7*). The findings in this report underscore the need for continued national and state-level public health initiatives to reduce cigarette smoking and children's exposure to ETS in the home.

In addition to addressing the smoking behaviors of adults and the related direct deleterious health effects for smokers, public health initiatives also must be directed toward the adverse effects on nonsmokers and on children exposed to ETS in the home. Strategies for reducing the prevalence of cigarette smoking and minimizing children's exposure to ETS include preventing young persons from initiating smoking, encouraging smokers to quit, and educating smokers about the hazards of ETS (*9*).

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Filter Ventilation Levels in Selected U.S. Cigarettes, 1997

Cigarette brands that deliver ≤15 mg of tar in official smoking-machine tests accounted for 72.7% of total cigarette sales in 1995 (*1*). Many of these brands use ventilated filters—a system with small perforations around the filter that are designed to draw in additional air during smoking. In brands with ventilated filters, air introduced through the vents dilutes the amounts of tar, nicotine, carbon monoxide (CO), and other hazardous constituents of cigarette smoke (*2*). This report summarizes results of tests conducted by researchers at The Pennsylvania State University during July 1997 to measure the percentage of air drawn through the filter vents of 32 brands of

Cigarette Filter Ventilation Levels — Continued

U.S. cigarettes that have tar yields rated by the Federal Trade Commission (FTC) as ranging from 1 mg–18 mg; the report also examines the correlation between the degree of filter ventilation and tar yield. The findings indicate that 30 (94%) of 32 brands tested were ventilated and that percentage filter ventilation varied inversely with standard tar, nicotine, and CO yields.

Testing conditions simulated consumer use of a freshly opened pack of cigarettes. One pack each of 32 commercially available cigarette brands was purchased from retail stores in State College, Pennsylvania, during July 1997. Each pack was opened, and 20 unlit cigarettes were tested within 10 minutes with an FDT Ventilation Tester (Fidus Instrument Corporation, Richmond, Virginia)*, which measured the percentage of additional air drawn into a puff through the filter vents (i.e., percentage filter ventilation†). The testing conditions were maintained at an ambient air temperature of 72 F (22 C) (range: 68 F–75 F [20 C–24 C]) and a relative humidity of 60% (range: 55%–65%). Because of the potential for smokers to knowingly or inadvertently block filter ventilation holes with their lips or fingers (*3*), the location of these holes was determined for each of the 32 brands by selecting one cigarette from each pack to be measured to the nearest 0.5 mm by two technicians.

The ventilation percentage for the 32 brands ranged from 0 to 83% (Table 1). Based on four categories of tar yield, there was a linear association between ventilation percentage and tar yield (Figure 1). Standard tar yields varied inversely with percentage filter ventilation (r=–0.93 [degrees of freedom=31]). In addition, ventilation percentage varied inversely with nicotine yield (r=–0.90) and CO yield (r=–0.95 [degrees of freedom=29]) (Table 1). The distance of filter vents from the mouth end of the filter ranged from 11 mm–15 mm (Table 1).

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Editorial Note: From 1954 to 1994, sales-weighted tar yields of cigarettes declined from an estimated average of 37 mg tar to 12 mg tar, respectively (*2,4*). Despite this decline in tar yields—attributable, in part, to the increased use of filter ventilation—the relative risk for lung cancer has increased, even when accounting for the delayed onset of mortality from tobacco-linked lung cancer (*5*). Factors potentially associated with the increase in smoking-related mortality are an increase in the number of cigarettes smoked (and therefore, tar exposure) by persons who use reduced-tar brands, inhaling more deeply, and an increased frequency of puffing (*2*). In addition, smokers who use reduced-tar cigarettes may be blocking some of the filter vents with their fingers or lips, therefore increasing their exposure to the carcinogens in cigarette smoke (*3*). Compensatory changes in smoking behaviors among persons who smoke reduced-tar cigarettes could be associated with changes in the risk, histology, and site of lung cancers (*6*).

*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

†The percentage of a standard puff (35-mL volume and 2-second duration) that is air taken into the puff through the filter vents. A cigarette with no filter ventilation would produce a puff undiluted by air from filter vents; a cigarette with 80% filter ventilation would produce a puff that is 80% air from vents and 20% smoke undiluted by air from vents.

Cigarette Filter Ventilation Levels — Continued

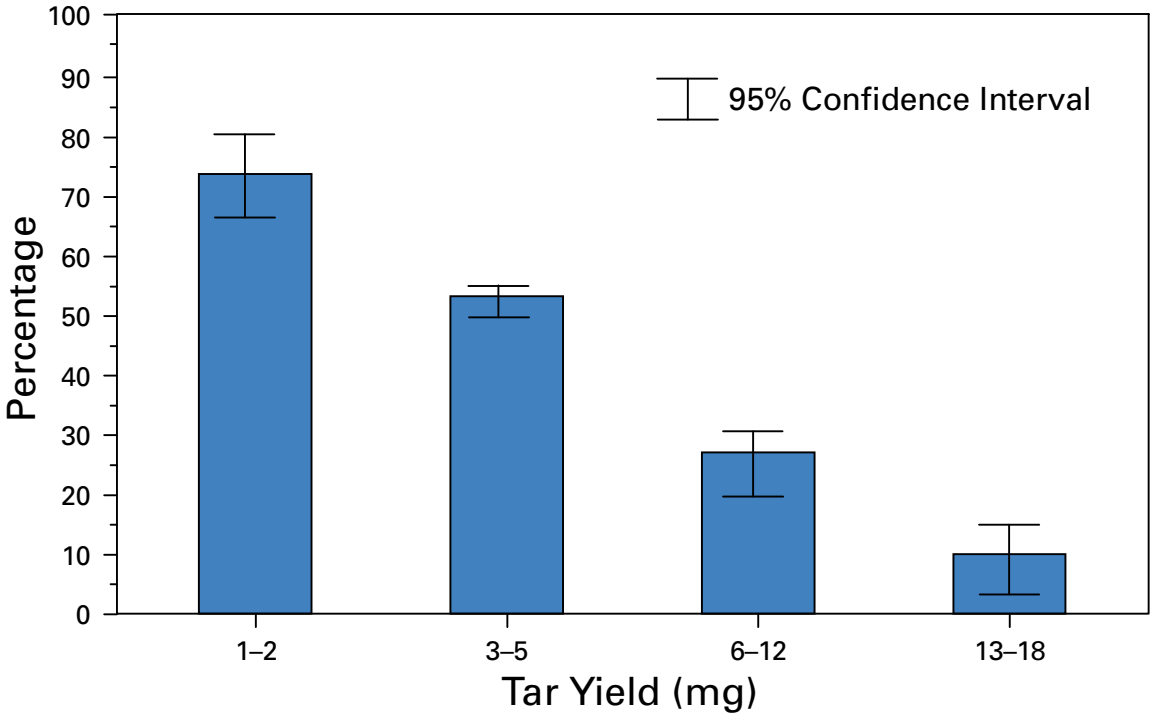
TABLE 1. Selected U.S. cigarette brands*, by tar, nicotine, and carbon monoxide (CO) yields†; by distance of closest vents from the mouth end of the filter; and by percentage of filter ventilation§ — State College, Pennsylvania, 1997

Brand¶	Yield			Closest vents (mm)	Ventilation	
	Tar (mg)	Nicotine (mg)	CO (mg)		%	(SEM**)
Carlton SP	1	0.1	2	15.0	77.6	(±0.32)
Carlton 100 HP	1	0.1	1	14.5	82.5	(±0.29)
Merit Ultima SP	1	0.1	3	11.0	64.4	(±1.45)
Carlton 100 SP	2	0.2	3	15.0	78.6	(±0.48)
Now 100 SP	2	0.2	3	12.5	66.3	(±0.59)
Doral UL SP	4	0.4	6	13.0	56.7	(±0.47)
Benson & Hedges Deluxe UL 100 HP	5	0.5	7	12.0	52.6	(±0.61)
Virginia Slims UL 100 HP	5	0.5	5	12.0	55.6	(±0.72)
Cambridge UL 100 SP	5	0.4	8	12.5	53.1	(±0.38)
Merit UL SP	5	0.5	6	11.5	49.0	(±0.54)
GPC UL SP	6	0.5	7	15.0	47.9	(±0.67)
Winston UL SP	6	0.5	8	13.0	48.1	(±0.64)
Merit HP	7	0.6	9	11.0	34.1	(±0.71)
Virginia Slims L 100 HP	8	0.7	8	12.0	39.7	(±0.46)
Doral L SP	8	0.6	10	12.5	18.9	(±0.59)
Newport L SP	9	0.7	11	14.0	21.8	(±0.62)
Red Kamel L HP††	10	0.8	NA	12.5	20.2	(±0.87)
Winston L SP	10	0.7	11	12.0	24.8	(±0.56)
Marlboro L SP	10	0.8	11	12.0	22.5	(±0.60)
Basic L HP	10	0.7	12	12.0	11.1	(±0.40)
GPC L SP	10	0.7	11	15.0	23.7	(±0.34)
Camel L HP	11	0.9	13	12.0	22.3	(±0.58)
Kool Milds SP	11	0.8	11	15.0	25.4	(±0.46)
Marlboro Mediums 100 SP	12	1.0	13	12.5	19.1	(±0.31)
Virginia Slims FF 100 SP	14	1.1	12	12.0	19.9	(±0.87)
Doral FF SP	14	0.9	15	12.0	12.6	(±0.27)
Kool Filter HP	15	1.0	14	—	0	
Winston FF SP	15	1.2	13	15.0	11.7	(±0.87)
Marlboro FF SP	16	1.1	15	12.5	10.2	(±0.26)
Newport FF HP	16	1.2	16	—	0	
Red Kamel FF HP††	17	1.3	NA	15.0	21.8	(±0.99)
Camel FF SP	18	1.4	20	14.5	5.1	(±0.22)

*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.
†Source: reference *4*.
§A system with small perforations around the filter that are designed to draw in additional air during smoking.
¶UL=ultra-light; L=light; FF=full flavor; SP=soft pack; HP=hard pack. Brand is king size unless designated 100.
**Standard error of the mean.
††Tar and nicotine yields were attained from advertisements; CO level was not available.

Cigarette Filter Ventilation Levels — Continued

FIGURE 1. Percentage filter ventilation* of cigarettes based on tar yields rated by the Federal Trade Commission — State College, Pennsylvania, 1997



*The percentage of a standard puff (35-mL volume and 2-second duration) that is air taken into the puff through the filter vents. A cigarette with no filter ventilation would produce a puff undiluted by air from filter vents; a cigarette with 80% filter ventilation would produce a puff that is 80% air from vents and 20% smoke undiluted by air from vents.

Blocking even a portion of the filter vents can markedly increase a smoker's exposure to the harmful components of cigarette smoke. Smokers can inadvertently block filter vents because filter vents often are invisible to the unaided eye and the filters do not include a marking (e.g., a colored band) to indicate the presence of vents. Blocking with the lips would more likely occur with the brands with filter vents closer to the mouth end of the filter (*7*) and blocking with the fingers would more likely occur with brands with filter vents further away from the mouth end of the filter (Table 1). One study has estimated that 58% of persons who smoke cigarettes with ≤4 mg tar are blocking some filter vents (*3*). In tests conducted on cigarette smoking machines, blocking half of the ventilation holes on a cigarette with standard yields of 4 mg tar, 0.5 mg nicotine, and 5 mg CO increased FTC-rated tar yields by 60%, nicotine by 62%, and CO by 73% (*8*). In addition, one study by the tobacco industry (*7*) estimated that, when smoking an ultra-light cigarette (2.2 mg tar), 45% of smokers blocked vents to some degree with their lips: 21% of smokers (or nearly half of those who blocked vents) increased tar yields to at least 3.3 mg tar (i.e., by ≥50%); overall, approximately one in 10 smokers (approximately 25% of those who blocked vents) were estimated to at least double their tar yields from blocking with their lips alone.

This study is subject to at least four limitations. First, although the cigarette brands tested reflected the range of tar yields for filter cigarettes, the analysis did not use a

Cigarette Filter Ventilation Levels — Continued

sales-weighted or representative sample of all available brands. For example, although cigarettes with <3 mg of tar were included in this study, such cigarettes accounted for only approximately 2% of sales in 1995 (*1*). Second, the findings for any specific brand could have been affected by factors unique to the sample of cigarettes delivered to the State College area, including, for example, manufacturing dates and retailers' storage conditions (e.g., temperature and humidity). Third, cigarettes were not maintained at standard temperature and humidity conditions for 24 hours before testing; this was done to simulate use of a freshly opened pack of cigarettes by a consumer. Finally, although the analysis used 1994 data on tar yields (*1,4*) (the most recent available), brand formulations may have changed since 1994.

Many smokers who block filter vents probably are exposed to substantially higher levels of hazardous smoke than the FTC-rated levels for those brands. The FTC recognizes that their machine-measured yields of tar and nicotine are poor predictors of exposure to toxic smoke products by smokers (*2*) and invites comments (until January 20, 1998) on proposed changes to its testing and reporting system (FTC file number P944509; additional information is available from the FTC's Bureau of Consumer Protection by contacting C. Lee Peeler, telephone [202] 326-3090, or Shira Modell, telephone [202] 326-3116). To identify cigarette brands in which vent-blocking probably is a problem, all cigarette testing should include measurement of filter ventilation.

An estimated two thirds of U.S. smokers either are unaware of the presence of vents on cigarettes or do not know that tar yields increase when vents are blocked (*9*). Filter vents can be difficult to see, which may account for the high proportion of smokers (80%) of "light" (6–15 mg tar) and "ultra-light" (1–5 mg tar) cigarettes who are unaware of the presence of vents on the brands they smoke (*10*). These findings underscore the need for intensified efforts to educate smokers about the risks associated with smoking reduced-tar cigarettes.

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Medical-Care Expenditures Attributable to Cigarette Smoking During Pregnancy — United States, 1995

An estimated 26% of women of reproductive age (i.e., 18–44 years) smoked in 1993 (*1*), and approximately 19%–27% of women smoke during pregnancy (*2,3*). Smoking during pregnancy is causally associated with an annual estimated 32,000–61,000 low-birthweight infants and 14,000–26,000 admissions to neonatal intensive-care units (*3*). The estimated smoking-attributable direct medical-care costs for chronic conditions in 1993 were $50.0 billion (*4*); however, this estimate omitted the direct medical costs of tobacco exposure for infants and children and most of these costs for pregnant women. To derive 1995 estimates of the smoking-attributable costs for direct medical expenditures (i.e., inpatient, physician, hospital outpatient, and emergency department costs) related to pregnancy outcomes, the University of California at Berkeley and CDC analyzed data from the 1987 National Medical Expenditures Survey (NMES-2). This report summarizes the findings, which indicate substantial smoking-attributable direct medical expenditures for pregnant women and newborns.

The NMES-2 is managed by the Agency for Health Care Policy and Research and is a population-based longitudinal survey of the civilian, noninstitutionalized U.S. population (*5*). The data are nationally representative and provide cost estimates based on amounts paid by all insurers and by persons paying out-of-pocket for health care. During February 1987–May 1988, data were obtained through a questionnaire administered to a cohort of 35,000 persons in 14,000 households during personal interviews. Of those initially screened, 80% participated in NMES-2. Data were collected about socioeconomic factors, health insurance coverage, use of medical care, and medical-care expenditures. The Medical Provider Use and Expenditure Survey, one supplement of NMES-2, confirmed self-reported medical-care costs and provided information about costs that survey respondents were unable to report. The Adult Self-Administered Questionnaire Household Survey (ASAQHS), also a supplement to NMES-2, provided data about self-reported health status and health-risk behaviors (e.g., smoking, safety-belt use, and obesity). The NMES-2 data indicated that health-care costs for respondents to the smoking question in ASAQHS were lower than those for nonrespondents, indicating response bias. The Heckman two-stage statistical approach (*6*) was used to adjust the data.

In this analysis, never smokers were compared with current smokers. Never smokers were defined as persons who smoked <100 cigarettes during their lifetimes, and current smokers, as persons who smoked ≥100 cigarettes during their lifetimes and who smoked at the time of the interview. Respondents to NMES-2 who were pregnant during 1987 were categorized by pregnancy outcome: miscarriage or stillbirth, uncomplicated birth, or complicated birth. A complicated birth was one for which the respondent indicated that the delivery had not been normal or the provider indicated the mother or the infant had been hospitalized under a diagnosis code indicating pregnancy complications (e.g., hemorrhage from placenta previa, maternal infection, fetal distress, or malposition of the fetus). Using multivariate analyses, the probability of each of these pregnancy outcomes and the expected expenditures for each were estimated based on sociodemographic factors (i.e., region of residence, age, race/ethnicity, income categories, marital status, education level, and insurance coverage), receipt and timing of prenatal care, and smoking status.

Cigarette Smoking During Pregnancy — Continued

Analysis of the 1987 data indicated that the probabilities of miscarriage or stillbirth (0.23) and complicated birth (0.25) were the same for smokers and nonsmokers. The estimated expenditure for an uncomplicated birth also was the same for smokers and nonsmokers—$3805 in 1987 dollars. However, the estimated cost of a complicated birth in 1987 was significantly higher for smokers than for nonsmokers ($10,894 versus $6544; $p<0.01$).

When extrapolated to the nation, the medical-care expenditures attributable to smokers with complicated births was an estimated $791 million in 1987 dollars, representing 11% of the total medical expenditures for all complicated births ($7 billion). These national estimates of smoking-attributable costs for complicated births were derived by using the probability of having a complicated birth (0.25), the number of live-born infants in 1987 (3.8 million) (*7*), an estimated smoking prevalence during pregnancy of 19%, and the smoking-attributable difference in the expected expenditures for complicated births determined from NMES-2. When a smoking prevalence during pregnancy of 27% (*3*) was used in the calculation, the estimated smoking-attributable costs were $1.1 billion (15%).

The smoking-attributable costs of complicated births were updated to 1995 by accounting for medical-care cost inflation* and the number of live-born infants in 1995 (3.9 million) (*7*). The total smoking-attributable costs were an estimated $1.4 billion (11% of costs for all complicated births) in 1995 dollars, based on a smoking prevalence during pregnancy of 19%, and an estimated $2.0 billion (15%), based on a smoking prevalence of 27%.

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Editorial Note: The findings in this report underscore the substantial and preventable economic impact of complicated births among smokers on the medical-care system in the United States: in 1987, the estimated direct medical cost of a complicated birth for a smoker was 66% higher than that for nonsmokers. Despite the magnitude of this difference, in this analysis, three factors probably resulted in underestimates of the smoking-attributable costs associated with pregnancy and delivery during 1987. First, in contrast to previously published reports (*3*), this analysis did not establish a positive relation between smoking during pregnancy and the probability of miscarriage and stillbirth or complicated births; this finding may reflect the small NMES-2 sample of births for which all data were available (n=490). Second, the smoking-attributable costs in this report did not include costs associated with the transfers of newborns to other hospitals or readmissions during the first year of life for medical conditions associated with smoking during pregnancy. Finally, the indirect costs related to infant mortality (e.g., years of productive life lost) and to maternal or infant morbidity (e.g., days lost at work) were excluded from this analysis.

The 1995 estimate of smoking-attributable costs also omits these costs. In addition, the precision of the 1995 estimate is affected by whether the probability of having a complicated birth increased or decreased during 1987–1995 and by changes in medical treatment patterns. For example, if complicated births were treated more inten-

*Adjustments for inflation were calculated using the medical services component of the Consumer Price Index.

Cigarette Smoking During Pregnancy — Continued

sively (i.e., with costlier medical technologies) in 1995 than in 1987, the methodology used to project 1995 expenditures probably would underestimate the 1995 smoking-attributable costs of complicated births.

The finding that the costs of complicated births for smokers exceeded those for nonsmokers may reflect greater severity of complications and, therefore, more intense treatment (e.g., longer hospital stays for the mother, more neonatal intensive-care unit days for the infant, and greater use of specialists as well as other personnel). Further analysis is needed to clarify the specific sources of these differences.

Smoking-cessation programs are an important strategy for preventing the adverse outcomes and related costs of smoking during pregnancy. For example, a meta-analysis of randomized trials of prenatal smoking-cessation programs using biochemical validation indicated a 50% increase in cessation over usual practice (*8*). Despite the effectiveness of this approach, many health-care providers do not offer such programs. To reduce smoking during pregnancy, patients must be more effectively educated about the health consequences of smoking during pregnancy both for them (e.g., placental complications) and for their unborn children (e.g., low birthweight), and health-care providers should be encouraged to provide this information (*9*). CDC is collaborating with a Robert Wood Johnson Foundation national program (Smoke-Free Families: Innovations to Stop Smoking During and Beyond Pregnancy), which supports the efforts of 10 grantees to develop, test, and evaluate innovative programs to assist childbearing-aged women in quitting smoking before, during, and after pregnancy and to maintain a smoke-free environment for their children.

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Notice to Readers

Availability of Applications for Public Health Prevention Service

The second class of the Public Health Prevention Service (PHPS), a new national training program for master's-level health professionals, will begin September 1998. PHPS offers 3 years of hands-on experience, training, and supervision in applying public health science and theory to building the programs that protect and improve the public's health. These prevention specialists will learn how to effectively apply surveillance, epidemiology, social and behavioral science, social marketing, health communications, and other disciplines to planning, implementing, and evaluating prevention strategies that are practical and effective at the community, state, and national levels. The training program will include two 6-month assignments at CDC in Atlanta, Georgia; Cincinnati, Ohio; Hyattsville, Maryland; or Morgantown, West Virginia, followed by a 2-year assignment in a state or local health department.

Applicants must have a strong interest in a public health career, a master's degree related to public health, and U.S. citizenship. At least 1 year of public health work experience (may include an internship or a thesis project in a community setting as part of a master's degree) is highly desirable. Applications must be submitted by January 5, 1998.

Additional information and applications are available from CDC's Public Health Prevention Service Branch, Division of Applied Public Health Training, Epidemiology Program Office, Mailstop D-18, 1600 Clifton Road, N.E., Atlanta, GA 30333; telephone (404) 639-4087; e-mail phpsepo@cdc.gov; or World-Wide Web site, http://www.cdc.gov/epo/dapht/phps.htm.

Notice to Readers

Availability of Histoplasmosis Prevention Guidelines

Histoplasmosis: Protecting Workers at Risk, revised guidelines for preventing histoplasmosis, was published by CDC's National Institute for Occupational Safety and Health (NIOSH) and National Center for Infectious Diseases (NCID). This publication describes information about health risks of *Histoplasma capsulatum* exposures and specific details about personal protective equipment. These guidelines are designed for health and safety professionals, environmental consultants, and persons supervising workers involved in activities where contaminated materials are disturbed.

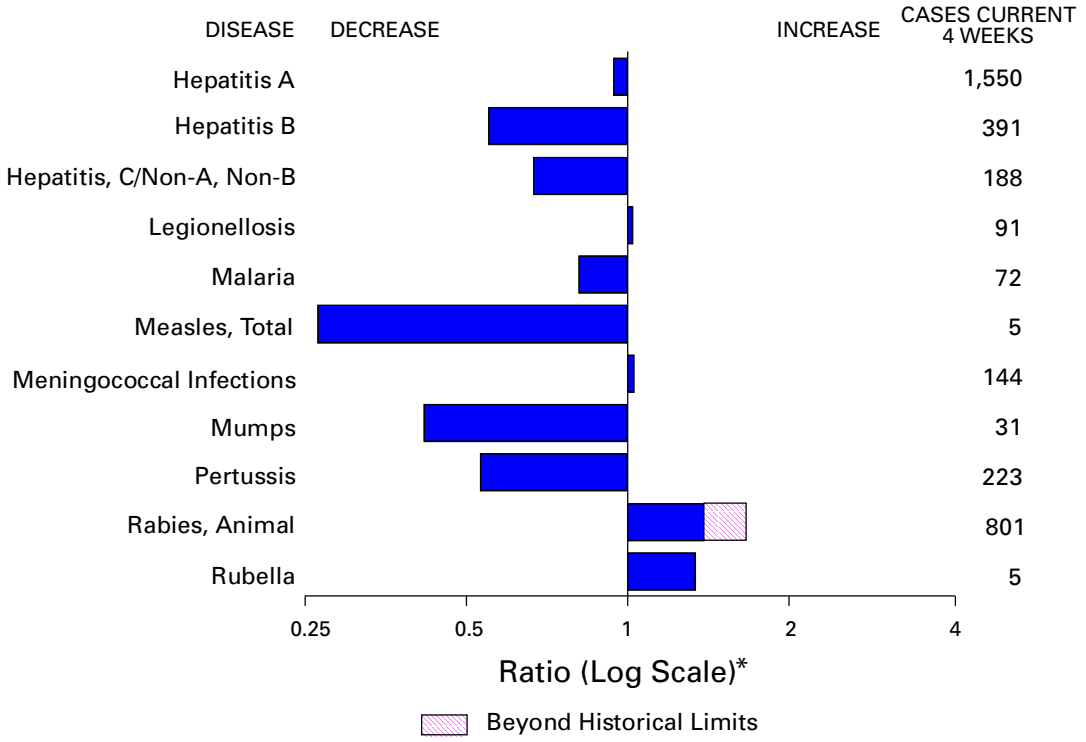
Additional information about the guidelines (publication no. 97-146) is available from NIOSH, Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226-1998; telephone (800) 356-4674; NCID, telephone (404) 639-3158; and the NIOSH website on the World-Wide Web (http://www.cdc.gov/niosh/homepage.html or http://www.cdc.gov/niosh/97-146.html).

Notice to Readers

Availability of New CDC Child Lead Screening Guidance

Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials, outlines a systematic process for states and communities to plan and implement effective childhood blood lead screening. A primary purpose of the document is to increase screening among children who are at high risk for lead exposure. Additional information is available from CDC's National Center for Environmental Health, toll-free telephone (888) 232-6789, or from the World-Wide Web site, http://www.cdc.gov/nceh/programs/lead/lead.htm.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending November 1, 1997, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending November 1, 1997 (44th Week)

	Cum. 1997		Cum. 1997
Anthrax	-	Plague	2
Brucellosis	61	Poliomyelitis, paralytic	-
Cholera	7	Psittacosis	38
Congenital rubella syndrome	4	Rabies, human	2
Cryptosporidiosis*	1,513	Rocky Mountain spotted fever (RMSF)	361
Diphtheria	5	Streptococcal disease, invasive Group A	1,174
Encephalitis: California*	98	Streptococcal toxic-shock syndrome*	29
eastern equine*	6	Syphilis, congenital¶	430
St. Louis*	10	Tetanus	37
western equine*	-	Toxic-shock syndrome	109
Hansen Disease	87	Trichinosis	7
Hantavirus pulmonary syndrome*†	16	Typhoid fever	282
Hemolytic uremic syndrome, post-diarrheal*	49	Yellow fever	-
HIV infection, pediatric*§	197		

-:no reported cases
*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly to the Division of HIV/AIDS Prevention, Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update October 28, 1997.
¶Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 1997, and November 2, 1996 (44th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	49,050	56,551	380,734	364,641	2,020	1,284	240,319	272,428	2,661	2,942
NEW ENGLAND	2,112	2,324	14,768	14,739	179	116	4,889	5,489	51	91
Maine	50	38	820	766	16	-	55	50	-	-
N.H.	35	73	673	644	12	14	80	140	8	7
Vt.	32	18	356	327	8	3	44	42	2	24
Mass.	734	1,132	6,233	5,876	95	84	1,836	1,842	34	54
R.I.	133	158	1,644	1,626	8	-	369	431	7	6
Conn.	1,128	905	5,042	5,500	40	15	2,505	2,984	-	-
MID. ATLANTIC	15,008	15,835	50,580	50,112	125	41	31,186	36,707	307	250
Upstate N.Y.	2,274	2,178	N	N	85	-	5,105	6,436	231	201
N.Y. City	8,026	8,644	26,129	24,519	11	6	11,829	11,959	-	3
N.J.	2,903	3,075	7,693	10,628	29	23	6,037	7,571	-	-
Pa.	1,805	1,938	16,758	14,965	N	12	8,215	10,741	76	46
E.N. CENTRAL	3,578	4,422	58,795	73,110	365	227	36,291	50,604	432	400
Ohio	724	938	16,979	17,602	101	48	10,670	12,873	17	32
Ind.	462	493	7,664	8,240	64	35	5,062	5,498	10	8
Ill.	1,523	1,980	8,985	20,711	62	-	4,489	14,835	69	79
Mich.	641	778	17,628	17,623	138	100	12,711	13,209	336	281
Wis.	228	233	7,539	8,934	N	44	3,359	4,189	-	-
W.N. CENTRAL	964	1,309	20,724	26,926	478	364	9,637	13,029	141	85
Minn.	177	259	U	4,494	209	185	U	1,881	3	3
Iowa	93	75	3,827	3,700	111	71	981	976	29	38
Mo.	452	667	10,021	10,568	47	63	6,233	7,334	94	22
N. Dak.	13	11	572	792	14	12	39	27	3	-
S. Dak.	8	11	1,134	1,249	28	23	129	155	-	-
Nebr.	84	87	2,066	2,328	48	-	864	927	2	7
Kans.	137	199	3,104	3,795	21	10	1,391	1,729	10	15
S. ATLANTIC	12,066	14,156	76,346	41,954	183	127	75,369	79,297	227	169
Del.	194	246	1,276	1,148	4	4	1,036	1,231	-	1
Md.	1,741	1,995	6,142	U	22	11	11,028	9,514	15	2
D.C.	895	1,116	N	N	2	-	3,729	3,871	-	-
Va.	1,011	964	9,714	9,779	N	41	7,120	8,042	24	15
W. Va.	112	101	2,483	1,848	N	1	793	678	16	9
N.C.	761	746	15,274	U	64	34	15,081	16,111	44	44
S.C.	698	715	10,634	U	8	7	9,806	9,569	35	28
Ga.	1,468	2,065	10,434	9,798	38	-	12,091	15,396	U	-
Fla.	5,186	6,208	20,389	19,381	40	29	14,685	14,885	93	70
E.S. CENTRAL	1,749	1,924	27,615	26,910	89	36	27,734	29,685	303	492
Ky.	319	345	5,359	5,741	28	-	3,474	3,592	12	28
Tenn.	684	702	10,743	11,530	44	36	9,361	10,223	215	348
Ala.	456	511	7,336	7,108	14	-	10,161	11,315	10	4
Miss.	290	366	4,177	2,531	3	-	4,738	4,555	66	112
W.S. CENTRAL	5,206	5,687	53,378	46,871	66	16	34,731	32,408	418	331
Ark.	193	226	2,072	1,566	9	5	3,466	3,480	8	8
La.	899	1,253	8,207	6,331	6	3	8,040	6,831	193	192
Okla.	256	227	6,301	6,356	9	5	4,071	4,116	7	1
Tex.	3,858	3,981	36,798	32,618	42	3	19,154	17,981	210	130
MOUNTAIN	1,409	1,639	21,049	22,008	227	131	7,392	6,468	399	491
Mont.	36	34	878	1,056	23	-	36	32	21	15
Idaho	48	34	1,403	1,289	32	22	125	91	60	94
Wyo.	13	5	505	520	16	12	44	38	191	150
Colo.	332	434	1,896	2,864	80	56	1,931	1,228	35	58
N. Mex.	145	139	2,571	3,350	7	6	983	766	49	69
Ariz.	348	488	10,501	9,105	N	25	3,518	3,159	25	67
Utah	119	159	1,440	1,331	58	-	227	253	4	19
Nev.	368	346	1,855	2,493	11	10	528	901	14	19
PACIFIC	6,958	9,254	57,479	62,011	308	224	13,090	18,741	383	633
Wash.	576	585	7,759	7,989	103	54	1,645	1,758	23	49
Oreg.	261	411	4,199	4,562	71	83	634	717	3	6
Calif.	6,004	8,071	42,772	46,885	123	77	10,067	15,501	217	394
Alaska	37	28	1,301	1,059	11	3	324	372	-	3
Hawaii	80	159	1,448	1,516	N	7	420	393	140	181
Guam	2	4	193	319	N	-	27	58	-	6
P.R.	1,714	2,014	U	U	38	U	489	563	129	139
V.I.	86	17	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	1	-	N	N	N	U	17	11	2	-

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention, Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention, last update October 28, 1997.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 1997, and November 2, 1996 (44th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	828	895	8,907	13,495	1,434	1,407	6,825	9,959	14,098	16,334	6,701
NEW ENGLAND	69	62	2,631	3,728	74	66	114	155	354	357	1,023
Maine	2	2	8	52	1	7	-	-	11	19	174
N.H.	7	3	37	44	8	2	-	1	13	14	32
Vt.	12	5	8	22	2	8	-	-	5	1	109
Mass.	22	25	293	232	25	24	56	67	213	179	235
R.I.	9	27	357	455	7	7	2	3	31	27	30
Conn.	17	N	1,928	2,923	31	18	56	84	81	117	443
MID. ATLANTIC	170	202	5,048	8,297	374	415	318	459	2,636	3,044	1,440
Upstate N.Y.	50	64	2,018	3,800	60	76	31	67	333	383	1,060
N.Y. City	8	19	61	376	213	249	71	125	1,357	1,572	U
N.J.	20	13	1,311	1,877	77	61	119	157	566	630	157
Pa.	92	106	1,658	2,244	24	29	97	110	380	459	223
E.N. CENTRAL	245	286	86	392	124	157	575	1,422	1,385	1,701	167
Ohio	109	91	53	24	18	13	181	532	228	246	110
Ind.	40	48	28	25	16	14	139	182	132	156	12
Ill.	14	31	5	8	39	77	61	404	688	896	17
Mich.	71	77	-	17	39	37	111	142	247	317	28
Wis.	11	39	U	318	12	16	83	162	90	86	-
W.N. CENTRAL	61	52	121	166	47	40	136	309	460	411	406
Minn.	2	8	89	63	19	18	U	38	122	92	43
Iowa	11	10	7	18	10	2	7	19	45	55	138
Mo.	27	15	17	46	9	10	101	210	200	161	22
N. Dak.	2	-	-	1	3	1	-	-	10	8	65
S. Dak.	2	2	1	-	1	-	-	-	10	17	62
Nebr.	12	12	3	5	1	2	5	10	17	21	2
Kans.	5	5	4	33	4	7	23	32	56	57	74
S. ATLANTIC	109	140	658	633	294	261	2,782	3,284	2,780	3,058	2,688
Del.	11	11	67	169	5	3	20	34	18	34	54
Md.	20	29	445	308	79	76	795	600	271	250	506
D.C.	4	7	8	3	19	8	100	109	82	118	5
Va.	22	35	56	47	64	42	208	349	254	282	591
W. Va.	N	N	8	11	1	5	3	9	47	50	82
N.C.	13	10	32	63	16	27	599	917	346	431	773
S.C.	7	6	2	6	17	12	328	350	242	302	159
Ga.	1	3	1	1	32	26	465	591	519	555	278
Fla.	30	39	39	25	61	62	264	325	1,001	1,036	240
E.S. CENTRAL	41	43	70	74	30	38	1,435	2,140	1,019	1,146	250
Ky.	6	6	8	26	8	10	118	131	138	191	27
Tenn.	28	19	38	20	7	14	642	724	357	402	137
Ala.	3	4	10	8	10	6	371	474	368	356	81
Miss.	4	14	14	20	5	8	304	811	156	197	5
W.S. CENTRAL	36	20	84	106	50	41	1,075	1,553	1,950	2,007	312
Ark.	-	1	24	22	5	-	125	213	155	167	52
La.	6	2	3	5	13	7	314	433	185	194	5
Okla.	7	7	23	21	7	-	108	156	153	142	100
Tex.	23	10	34	58	25	34	528	751	1,457	1,504	155
MOUNTAIN	55	44	20	8	62	55	187	135	418	524	172
Mont.	1	1	-	-	2	7	-	-	7	18	46
Idaho	2	-	4	1	-	-	1	4	11	7	-
Wyo.	1	6	4	3	2	7	-	2	2	6	31
Colo.	17	8	6	-	27	21	12	24	70	74	19
N. Mex.	3	2	1	1	8	2	16	7	53	77	12
Ariz.	12	17	2	-	11	7	144	79	202	195	50
Utah	12	3	1	1	3	5	5	2	27	39	6
Nev.	7	7	2	2	9	6	9	17	46	108	8
PACIFIC	42	46	189	91	379	334	203	502	3,096	4,086	243
Wash.	7	6	8	14	19	21	9	9	225	237	-
Oreg.	-	-	17	19	21	20	9	8	125	142	14
Calif.	34	35	162	57	329	281	183	482	2,545	3,478	206
Alaska	-	1	2	-	3	3	1	-	66	60	23
Hawaii	1	4	-	1	7	9	1	3	135	169	-
Guam	-	1	-	-	-	-	3	3	13	74	-
P.R.	-	-	-	-	5	2	213	182	164	137	60
V.I.	-	-	-	-	-	1	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	9	1	2	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 1, 1997, and November 2, 1996 (44th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	870	871	23,115	24,240	7,221	8,221	-	66	-	55	121	480
NEW ENGLAND	54	30	553	352	119	185	-	11	-	8	19	16
Maine	5	-	52	21	6	2	-	-	-	1	1	-
N.H.	9	11	30	18	15	15	-	1	-	-	1	-
Vt.	3	1	12	11	5	12	-	-	-	-	-	2
Mass.	33	16	213	170	47	71	-	10	-	6	16	12
R.I.	2	2	126	20	14	9	-	-	-	-	-	-
Conn.	2	-	120	112	32	76	-	-	-	1	1	2
MID. ATLANTIC	120	178	1,596	1,665	1,100	1,200	-	17	-	8	25	37
Upstate N.Y.	31	44	287	380	245	288	-	2	-	3	5	11
N.Y. City	30	47	584	506	377	427	-	8	-	2	10	11
N.J.	41	48	246	319	200	237	-	2	-	-	2	3
Pa.	18	39	479	460	278	248	-	5	-	3	8	12
E.N. CENTRAL	140	155	2,273	2,156	730	924	-	7	-	3	10	20
Ohio	78	81	273	662	69	112	-	-	-	-	-	5
Ind.	14	13	254	287	80	118	-	-	-	-	-	-
Ill.	33	43	509	647	177	296	-	6	-	1	7	3
Mich.	14	9	1,104	385	365	316	-	-	-	2	2	3
Wis.	1	9	133	175	39	82	-	1	-	-	1	9
W.N. CENTRAL	47	37	1,861	2,168	390	439	-	12	-	5	17	22
Minn.	33	23	165	111	36	54	-	3	-	5	8	18
Iowa	6	4	404	300	38	59	-	-	-	-	-	-
Mo.	4	7	937	1,137	272	256	-	1	-	-	1	3
N. Dak.	-	-	10	117	4	2	-	-	-	-	-	-
S. Dak.	2	1	19	42	1	5	-	8	-	-	8	-
Nebr.	1	1	89	127	12	35	-	-	-	-	-	-
Kans.	1	1	237	334	27	28	-	-	-	-	-	1
S. ATLANTIC	140	158	1,680	1,153	1,070	1,116	-	1	-	13	14	11
Del.	-	2	29	17	6	9	-	-	-	-	-	1
Md.	49	55	194	207	156	141	-	-	-	2	2	2
D.C.	-	5	28	35	28	30	-	-	-	1	1	-
Va.	12	9	198	152	108	121	-	-	-	1	1	3
W. Va.	3	10	10	14	14	28	-	-	-	-	-	-
N.C.	21	23	174	142	215	278	-	-	-	2	2	2
S.C.	4	4	95	46	90	81	-	-	-	1	1	-
Ga.	28	32	459	149	110	32	-	-	-	1	1	2
Fla.	23	18	493	391	343	396	-	1	-	5	6	1
E.S. CENTRAL	40	25	518	1,114	575	739	-	-	-	-	-	2
Ky.	5	6	67	45	33	68	-	-	-	-	-	-
Tenn.	22	9	320	711	384	416	-	-	-	-	-	2
Ala.	13	9	77	170	60	63	-	-	-	-	-	-
Miss.	-	1	54	188	98	192	-	-	-	-	-	-
W.S. CENTRAL	44	37	4,965	4,858	1,049	1,056	-	3	-	5	8	26
Ark.	1	-	202	396	54	73	-	-	-	-	-	-
La.	11	4	214	172	139	130	-	-	-	-	-	-
Okla.	28	29	1,284	2,073	41	24	-	-	-	1	1	-
Tex.	4	4	3,265	2,217	815	829	-	3	-	4	7	26
MOUNTAIN	82	48	3,765	3,830	773	989	-	6	-	2	8	157
Mont.	-	1	66	104	9	15	-	-	-	-	-	-
Idaho	1	1	118	213	40	83	-	-	-	-	-	1
Wyo.	4	-	34	31	31	38	-	-	-	-	-	1
Colo.	12	14	361	404	138	113	-	-	-	-	-	7
N. Mex.	9	10	311	324	227	365	-	-	-	-	-	17
Ariz.	30	15	1,998	1,492	180	216	-	5	-	-	5	8
Utah	3	7	504	889	83	80	-	-	-	1	1	118
Nev.	23	-	373	373	65	79	-	1	-	1	2	5
PACIFIC	203	203	5,904	6,944	1,415	1,573	-	9	-	11	20	189
Wash.	5	4	552	581	65	85	-	1	-	1	2	38
Oreg.	29	26	331	771	94	91	-	-	-	-	-	13
Calif.	156	165	4,868	5,477	1,227	1,373	-	6	-	8	14	41
Alaska	6	6	27	40	19	12	-	-	-	-	-	63
Hawaii	7	2	126	75	10	12	-	2	-	2	4	34
Guam	-	-	-	7	3	1	U	-	U	-	-	-
P.R.	-	2	238	204	1,238	850	-	-	-	-	-	2
V.I.	-	-	-	32	-	35	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	6	10	1	1	34	5	U	1	U	-	1	-

N: Not notifiable U: Unavailable -: no reported cases

*Of 195 cases among children aged <5 years, serotype was reported for 104 and of those, 42 were type b.

†For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 1, 1997, and November 2, 1996 (44th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	2,719	2,785	9	474	596	54	4,226	5,271	-	155	220
NEW ENGLAND	174	120	1	9	1	11	768	1,253	-	1	27
Maine	17	10	-	-	-	-	6	39	-	-	-
N.H.	15	7	-	-	-	6	113	122	-	-	-
Vt.	4	4	-	-	-	1	204	131	-	-	2
Mass.	83	51	-	2	1	4	403	902	-	1	21
R.I.	19	13	1	6	-	-	16	30	-	-	-
Conn.	36	35	-	1	-	-	26	29	-	-	4
MID. ATLANTIC	270	282	-	45	78	-	305	418	-	30	12
Upstate N.Y.	56	76	-	9	23	-	109	231	-	3	4
N.Y. City	42	39	-	3	18	-	59	41	-	27	5
N.J.	57	57	-	5	4	-	9	28	-	-	2
Pa.	115	110	-	28	33	-	128	118	-	-	1
E.N. CENTRAL	390	390	3	56	113	5	372	637	-	5	3
Ohio	148	137	3	28	40	4	144	237	-	-	-
Ind.	45	52	-	9	8	1	51	56	-	-	-
Ill.	121	112	-	10	21	-	64	150	-	2	1
Mich.	45	40	-	9	41	-	44	40	-	-	2
Wis.	31	49	-	-	3	-	69	154	-	3	-
W.N. CENTRAL	204	201	1	15	18	14	368	355	-	-	-
Minn.	34	25	-	5	6	12	233	279	-	-	-
Iowa	45	42	1	8	2	1	54	17	-	-	-
Mo.	88	76	-	-	7	1	54	34	-	-	-
N. Dak.	2	3	-	-	2	-	2	1	-	-	-
S. Dak.	5	10	-	-	-	-	4	4	-	-	-
Nebr.	12	21	-	2	-	-	8	7	-	-	-
Kans.	18	24	-	-	1	-	13	13	-	-	-
S. ATLANTIC	492	542	1	64	96	3	390	549	-	82	91
Del.	5	2	-	-	-	-	1	22	-	-	-
Md.	41	54	1	5	31	2	108	211	-	-	-
D.C.	8	5	-	-	-	-	3	1	-	1	1
Va.	50	54	-	10	14	-	42	76	-	1	2
W. Va.	16	16	-	-	-	-	6	2	-	-	-
N.C.	84	67	-	10	20	-	109	97	-	59	77
S.C.	51	53	-	10	6	-	25	40	-	19	1
Ga.	95	123	-	10	3	-	13	19	-	-	-
Fla.	142	168	-	19	22	1	83	81	-	2	10
E.S. CENTRAL	207	206	2	24	20	1	115	192	-	-	2
Ky.	42	27	-	3	-	-	46	140	-	-	-
Tenn.	77	55	-	5	1	1	36	20	-	-	-
Ala.	70	76	1	9	4	-	25	23	-	-	2
Miss.	18	48	1	7	15	-	8	9	-	-	N
W.S. CENTRAL	264	292	-	50	43	5	210	142	-	4	8
Ark.	31	30	-	1	1	4	49	7	-	-	-
La.	46	56	-	12	13	-	18	9	-	-	1
Okla.	37	35	-	-	1	-	27	17	-	-	-
Tex.	150	171	-	37	28	1	116	109	-	4	7
MOUNTAIN	162	160	-	54	23	9	1,011	464	-	6	6
Mont.	9	9	-	-	-	1	18	33	-	-	-
Idaho	10	22	-	3	-	1	560	100	-	1	2
Wyo.	4	3	-	1	-	-	7	6	-	-	-
Colo.	44	36	-	3	4	5	267	180	-	-	2
N. Mex.	25	24	N	N	N	1	88	61	-	-	-
Ariz.	41	35	-	32	1	-	35	28	-	5	1
Utah	12	15	-	8	3	1	18	18	-	-	-
Nev.	17	16	-	7	15	-	18	38	-	-	1
PACIFIC	556	592	1	157	204	6	687	1,261	-	27	71
Wash.	74	88	1	19	20	6	322	541	-	5	15
Oreg.	112	103	N	N	N	-	17	59	-	-	1
Calif.	361	388	-	111	153	-	321	625	-	14	52
Alaska	2	8	-	4	3	-	14	3	-	-	-
Hawaii	7	5	-	23	28	-	13	33	-	8	3
Guam	1	4	U	1	10	U	-	-	U	-	-
P.R.	10	11	-	7	1	-	1	3	-	-	-
V.I.	-	-	-	-	1	-	-	-	-	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	4	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending November 1, 1997 (44th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	591	437	110	28	9	7	42
Boston, Mass.	158	101	36	13	3	5	10
Bridgeport, Conn.	33	24	6	2	1	-	4
Cambridge, Mass.	14	11	2	1	-	-	2
Fall River, Mass.	33	27	5	-	1	-	-
Hartford, Conn.	57	37	13	6	1	-	-
Lowell, Mass.	28	23	4	1	-	-	2
Lynn, Mass.	12	7	5	-	-	-	-
New Bedford, Mass.	24	24	-	-	-	-	2
New Haven, Conn.	50	37	10	2	1	-	1
Providence, R.I.	57	44	12	-	-	1	1
Somerville, Mass.	4	4	-	-	-	-	-
Springfield, Mass.	34	28	4	2	-	-	4
Waterbury, Conn.	29	25	2	1	-	1	5
Worcester, Mass.	58	45	11	-	2	-	11
MID. ATLANTIC	2,485	1,705	505	196	44	35	113
Albany, N.Y.	46	37	4	1	3	1	2
Allentown, Pa.	20	18	1	1	-	-	-
Buffalo, N.Y.	61	49	9	-	-	3	3
Camden, N.J.	21	11	6	2	1	1	1
Elizabeth, N.J.	17	10	5	1	1	-	-
Erie, Pa.	46	41	4	1	-	-	2
Jersey City, N.J.	46	26	7	9	2	2	2
New York City, N.Y.	1,220	825	275	91	18	11	50
Newark, N.J.	65	34	16	12	1	2	1
Paterson, N.J.	28	23	2	2	1	-	-
Philadelphia, Pa.	499	323	104	49	13	10	25
Pittsburgh, Pa.§	85	61	17	6	1	-	6
Reading, Pa.	30	25	2	2	-	1	3
Rochester, N.Y.	119	99	12	6	2	-	10
Schenectady, N.Y.	U	U	U	U	U	U	U
Scranton, Pa.	24	17	6	1	-	-	1
Syracuse, N.Y.	88	62	19	4	-	3	3
Trenton, N.J.	53	32	12	7	1	1	3
Utica, N.Y.	17	12	4	1	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,107	1,459	385	159	51	51	129
Akron, Ohio	45	38	4	2	-	1	-
Canton, Ohio	31	25	4	1	-	1	2
Chicago, Ill.	400	233	88	50	16	12	19
Cincinnati, Ohio	122	86	29	4	-	3	8
Cleveland, Ohio	137	83	31	16	2	5	4
Columbus, Ohio	200	149	25	15	9	2	13
Dayton, Ohio	127	90	24	8	3	2	11
Detroit, Mich.	217	139	43	23	4	8	5
Evansville, Ind.	57	46	5	3	-	3	2
Fort Wayne, Ind.	59	45	10	3	-	1	5
Gary, Ind.	10	5	3	2	-	-	-
Grand Rapids, Mich.	51	37	11	1	1	-	5
Indianapolis, Ind.	174	126	30	8	5	5	11
Lansing, Mich.	43	30	5	5	3	-	3
Milwaukee, Wis.	131	94	27	4	-	6	8
Peoria, Ill.	46	32	10	2	1	1	4
Rockford, Ill.	47	36	6	3	2	-	10
South Bend, Ind.	36	32	3	-	1	-	6
Toledo, Ohio	99	73	18	5	3	-	7
Youngstown, Ohio	75	60	9	4	1	1	6
W.N. CENTRAL	871	616	165	52	19	10	34
Des Moines, Iowa	67	46	15	4	2	-	7
Duluth, Minn.	29	24	3	-	2	-	1
Kansas City, Kans.	38	24	6	7	1	-	-
Kansas City, Mo.	82	45	19	5	4	-	7
Lincoln, Nebr.	67	49	13	3	2	-	6
Minneapolis, Minn.	184	143	24	12	2	3	3
Omaha, Nebr.	89	63	17	6	1	2	2
St. Louis, Mo.	103	68	22	9	3	1	-
St. Paul, Minn.	110	83	24	1	-	2	7
Wichita, Kans.	102	71	22	5	2	2	1
S. ATLANTIC	963	642	178	98	24	20	55
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	147	96	26	18	5	2	17
Charlotte, N.C.	107	74	18	10	3	2	6
Jacksonville, Fla.	123	77	26	13	1	5	2
Miami, Fla.	102	66	25	8	2	1	1
Norfolk, Va.	58	39	9	5	2	3	4
Richmond, Va.	60	36	12	6	6	-	5
Savannah, Ga.	57	36	15	5	-	1	8
St. Petersburg, Fla.	50	33	7	6	1	3	-
Tampa, Fla.	182	135	28	13	3	3	11
Washington, D.C.	64	45	9	9	1	-	1
Wilmington, Del.	13	5	3	5	-	-	-
E.S. CENTRAL	656	446	142	41	13	13	33
Birmingham, Ala.	168	122	33	10	1	1	11
Chattanooga, Tenn.	50	37	10	2	1	-	6
Knoxville, Tenn.	112	70	27	7	5	3	7
Lexington, Ky.	95	59	24	8	1	3	6
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	52	36	11	2	2	1	1
Montgomery, Ala.	41	30	8	2	1	-	1
Nashville, Tenn.	138	92	29	10	2	5	1
W.S. CENTRAL	1,451	947	311	110	53	30	90
Austin, Tex.	76	45	20	5	6	-	5
Baton Rouge, La.	53	44	5	2	1	1	2
Corpus Christi, Tex.	36	28	7	1	-	-	2
Dallas, Tex.	143	81	36	16	4	6	5
El Paso, Tex.	77	55	12	6	2	2	3
Ft. Worth, Tex.	112	77	19	8	8	-	8
Houston, Tex.	396	247	91	34	15	9	37
Little Rock, Ark.	52	27	19	4	1	1	3
New Orleans, La.	101	62	23	9	5	2	-
San Antonio, Tex.	207	142	40	15	7	3	10
Shreveport, La.	65	45	14	3	2	1	4
Tulsa, Okla.	133	94	25	7	2	5	11
MOUNTAIN	964	665	179	72	35	13	66
Albuquerque, N.M.	112	82	18	7	3	2	2
Boise, Idaho	42	39	3	-	-	-	4
Colo. Springs, Colo.	50	40	5	4	1	-	2
Denver, Colo.	123	75	31	5	8	4	4
Las Vegas, Nev.	187	129	35	14	8	1	9
Ogden, Utah	30	23	5	2	-	-	-
Phoenix, Ariz.	161	97	33	23	6	2	19
Pueblo, Colo.	21	16	3	2	-	-	1
Salt Lake City, Utah	106	66	20	10	6	4	10
Tucson, Ariz.	132	98	26	5	3	-	15
PACIFIC	1,955	1,379	345	139	45	47	145
Berkeley, Calif.	21	15	4	2	-	-	1
Fresno, Calif.	58	39	12	5	2	-	4
Glendale, Calif.	31	26	2	3	-	-	-
Honolulu, Hawaii	81	53	14	5	3	6	4
Long Beach, Calif.	84	54	19	5	2	4	11
Los Angeles, Calif.	556	389	94	44	17	12	18
Pasadena, Calif.	34	23	7	4	-	-	5
Portland, Oreg.	136	106	20	5	4	1	1
Sacramento, Calif.	212	153	35	16	5	3	27
San Diego, Calif.	120	77	27	8	3	5	18
San Francisco, Calif.	124	83	31	7	1	2	16
San Jose, Calif.	179	124	33	14	2	6	22
Santa Cruz, Calif.	37	26	7	2	2	-	5
Seattle, Wash.	138	102	17	11	3	5	5
Spokane, Wash.	62	50	6	3	1	2	2
Tacoma, Wash.	82	59	17	5	-	1	6
TOTAL	12,043¶	8,296	2,320	895	293	226	707

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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